DOCUMENT RESUME

ED 201 309 IR 009 201

TITLE	Project To Design a Marketing Plan for Promoting Educators' Awareness of and Access to ERIC Products. Proposed Marketing Plan.
INSTITUTION	Contemporary Associates, Inc., Washington, D.C.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	30 Jun 80
CONTRACT	400-79-0065
NOTE	27p.; For related document, see IR 009 202.
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Clearinghouses; Comparative Analysis; Costs; Information Dissemination; Information Services; *Marketing; Models; Planning; *Publications; Surveys; Use Studies
IDENTIFIERS	*ERIC

ABSTRACT

The proposed strategy, which is designed to maximize the effectiveness and minimize the costs of marketing the Information Analysis Products (IAPs) produced by the 16 ERIC Clearinghouses, is based on a study of the concept of centralized versus decentralized ordering of selected ERIC products. The experiment measured four variables--postage, wages, materials, and miscellaneous cost. It also measured the clients' interest in ordering materials from more than one discipline, and tested a model for the distribution of products from a centralized source. This report describes the current marketing philosophy of ERIC, which is predicated on the fact that the federal government cannot collect funds for sale or profit; describes the current marketing strategies used by the individual clearinghouses; discusses three optional marketing strategies; and describes a role that the National Institute of Education could play in coordinating marketing for the ERIC system. Data on the comparative study of centralized and decentralized ordering are attached. (CHC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED201309

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PROJECT TO DESIGN A MARKETING PLAN FOR PROMOTING EDUCATORS' AWARENESS OF AND ACCESS TO ERIC PRODUCTS:

Proposed Marketing Plan

The material reported herein was produced by Contemporary Associates, Incorporated pursuant to Contract No. 400-79-0065. The ideas and opinions expressed herein do not necessarily reflect those of the National Institute of Education and no endorsement is inferred.

IR009201

TABLE OF CONTENTS

SECTION		Page
1.0	STATEMENT OF THE PROBLEM	1
2.0	EVIDENCES OF EFFECTIVE MARKETING STRATEGIES.....	2
3.0	MARKETING PHILOSOPHY OF ERIC.....	3
4.0	SUGGESTED OPTIONAL STRATEGIES FOR CLEARING-HOUSES MARKETING APPROACH.....	8
5.0	NIE MARKETING PROGRAM: MARKETING PLAN RECOMMENDATIONS FOR THE ERIC SYSTEM.....	15

APPENDICES

APPENDIX A: Tables of Comparative Ordering for Eric Products (Centralized vs. Decentralized) 18

LIST OF FIGURES

Figure 1 -- Summary of Current Marketing Strategy of Production Oriented Clearinghouses..... 5

Figure 2 -- Market Oriented Firm or Organizations' Approach to Marketing..... 6

Figure 3 -- A Suggested Model for Clearinghouse Marketing Requirements #1 10

Figure 4 -- A Suggested Model for Clearinghouse Marketing Requirements #2..... 12

Figure 5 -- A Suggested Model for Clearinghouse Marketing Requirements #3..... 14

1.0 STATEMENT OF THE PROBLEM

The marketing problem to be addressed is how to maximize effectiveness and minimize cost of a marketing system that encompasses 16 Clearinghouses, that are part of the ERIC network, spread throughout the United States. The problem is further complicated by the fact that each Clearinghouse specializes in a different, multidiscipline educational area.

At present each Clearinghouse searches out (RIE and CIJE) material for inclusion in the ERIC abstract journals and the ERIC data bank. Interested persons therefore have access to educational material in the sixteen subject areas. These materials consist of innovative programs, conference proceedings, bibliographies, outstanding professional papers, curriculum related materials and current research and development reports.

Clearinghouses develop a client base (market) by association with professional organizations and educators in the field serviced by the Clearinghouse. Some Clearinghouses print and market their own material; others develop the material and submit it to a publisher for printing and marketing.

In order for a client to know what each of the Clearinghouses currently publishes, it is necessary to obtain access to the ERIC Information Analysis Product Catalog or to contact the Clearinghouse that specializes in the area of interest. If a client has interest in products located at three different Clearinghouses, it is necessary to send separate orders and checks to each. The major mandate of this effort is to design an efficient and effective marketing plan to make clients more aware of and give clients better access to ERIC products.

Several areas may be singled out for particular scrutiny. First of all, Are products available to potential customers? A second area of concern is the client base for ERIC products. Is the current reference manual awesome and intimidating to customers? The present method of marketing based on data findings of the Clearinghouse site visits and the Users' Survey is not reaching and creating awareness for many potential and current ERIC customers. Since each Clearinghouse (through an association) finds its own clients, it becomes difficult to avoid duplication of mailing lists which, of course is not cost effective.

2.0 EVIDENCES OF EFFECTIVE MARKETING STRATEGIES

Contemporary Associates, Inc., tested the concept of centralized versus decentralized ordering of selected ERIC products. The experiment measured four variables; postage, wages, materials and miscellaneous cost. It also measured the clients' interest in ordering material of more than one discipline. A plus to this experiment was the opportunity to test a model for the distribution of products from a centralized source.

As shown in Appendix A the costs and other factors related to this experiment were much lower for distribution of products from a centralized source than from a decentralized source.

Several quantitative factors related to potential clients were not measurable in this limited effort, e.g., the number of clients not being served. However, our marketing plan will suggest techniques to reach and serve this "untapped" market that our research suggests exists and is not being adequately served.

3.0 THE MARKETING PHILOSOPHY OF ERIC

The current marketing philosophy of ERIC is predicated on the fact that the federal government cannot collect funds for sales or profit. The Government Printing Office is the only government agency authorized to publish and sell government documents.

Currently, the sixteen (16) Clearinghouses have three alternative systems for marketing their products. They are:

(1) the Clearinghouse develops the product and turns it over to the affiliate organizations for printing and distribution;

(2) the Clearinghouse develops and prints the products and turns copies over to the affiliate for distribution - the Clearinghouse also distributes the products to clientele;

(3) the Clearinghouse develops the product; the product is submitted to publisher for printing and distribution.

The three alternatives facilitate and accommodate the government restriction on sales and profit. However, the study of the sixteen (16) Clearinghouses clearly showed that the affiliate organizations and publishers realize some profits from their distribtuion of Clearinghouse products.

It was difficult however, to obtain specific data on sales for all Clearinghouse products. This data is sorely needed for informed decision-making regarding the ultimate marketing plan adopted by ERIC. This data is not in the possession of most Clearinghouses; it would have to be collected from the affiliate organizations or publishers.

Based on the current philosophical thrust of the ERIC, production of materials to distribute to fill client indicated needs seems to be the current thrust. Production seems to be the starting point for most ERIC Clearinghouses.

The data generated from the Clearinghouse Survey shows that Clearinghouses made several important recommendations related to the current marketing strategy utilized:

- Marketing Weaknesses:

  a. "Not enough money for advertising.

  b. Costliness of penetrating new and large markets.

c. Can not get a commitment to distribute product until affiliate sees finished product.

d. Need to broaden our users and distribution.

e. Non-exploitation of all potential client groups.

f. Failure to address marketing efforts for specific kinds of publications to specific appropriate audiences.

g. Failure to make sufficient use of free, inexpensive, or cost effective strategies for promoting individual products.

h. Can not advertise directly.

i. Do not reach as many teachers as we would like to - this is true of whole ERIC System.

j. No PR staff to handle Marketing.

k. We do not know advertising and do not do market surveys.

l. Determining number of copies.

m. Limited Access to the Market.

n. Marketing is secondary function of Clearinghouse plus neither time nor budget for effective job."

- Barriers to Product Marketing

a. "NIE should mandate user evaluation of products produced.

b. Getting enough copies to meet the demand.

c. Money for distribution.

d. Difficult to do both marketing and production.

e. No, there are no barriers to effectively marketing products.

f. Cost effective measures sometimes produce poor advertising techniques.

g. Decentralized distribution of Clearinghouse products."

- Marketing Assistance Requested from NIE:

a. "Give greater exposure to the Clearinghouses and ERIC.

b. Coordinate all DOE dissemination efforts.

c. NIE builds programs but does not let the public know about them.

d. NIE can assist in improving the marketing program by building a complete up-to-date (about 10 pages) brochure of what is in the IAP.

e. Give marketing advice and techniques from a specialist.

f. Provide money for marketing.

g. Rescind the new guidelines specifying that the ERIC logo must appear in a prominent place on the cover of every IAP.

h. Provide money to purchase mailing lists to reach a wider audience.

i. Provide monies for additional staff to handle marketing.

j. Provide monies for ads and flyers.

k. Put together IAP's under separate cover for separate audiences.

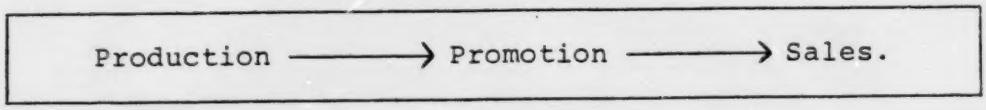
l. Develop total Marketing Plan for all Clearinghouses.

m. Monthly bulletin to educational libraries and meetings.

These comments made by the Clearinghouses clearly show a concern on their part that the market acceptability of their products seems to occur after the items are produced and that they have some desire to become more market oriented.

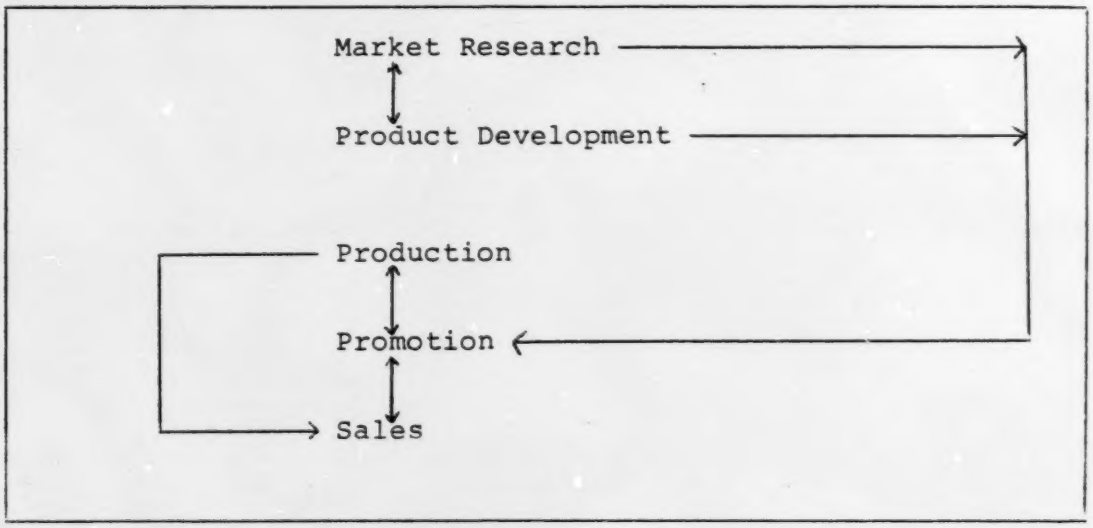
Figure I indicates what appears to be the present general marketing model of the Clearinghouses based on the Clearinghouses' Survey conducted by Contemporary Associates, Inc.

Figure 1
Summary of Current Marketing Strategy of
Production Oriented Clearinghouses



In constrast the market research oriented approach is shown in Figure 2. The market-oriented firm or organization sets promotion into action as they seek the market and develop the product, as shown in Figure 2.

Figure 2
Market-Oriented Firm or Organization's
Approach to Marketing



Focusing on the market would lead to the development of a new ERIC organizational philosophy. The philosophy would be that all major product and promotional decisions should begin with an understanding of the needs of the client. All internal activities within a Clearinghouse would be organized in such a way as to focus on the market place so that the Clearinghouse's activities culminate in reaching the maximum number of clients and generating the maximum number of sales.

What this means is that with a market research orientation - who we are trying to serve - an organization begins to broaden its base and seeks new clients. Product development asks the question, "What do the users of our product want?" Promotion seeks answers also: How to make clients aware? How to persuade them to buy the products of the Clearinghouse? If all activities use as their base the "client" and think in terms of understanding the client's needs and then how to satisfy those needs, the process would culminate in the Clearinghouse producing products that are designed exclusively for sale to meet client needs.

The production oriented firm or organization suffers from producing products that are not always needed or wanted by a large segment of the market thereby increasing the cost of promotion, selling and carrying of inventory. By contrast the market-oriented Clearinghouse would function in an open

system in that there is two way communication between the Clearinghouse and the client.

The market researchers seek new markets, and determine needs so that products can be developed to meet these needs. Promotion works with these two elements to develop a demand for the products and as the demand builds production is begun. In the market research approach, products are produced only if they will sell.

4.0 SUGGESTED OPTIONAL STRATEGIES FOR CLEARINGHOUSES MARKETING APPROACH

Since the ERIC System is constrained by law in the sales and collection of funds for its products. Several possible alternative marketing strategies which can be utilized to make the ERIC System more cost effective are presented here. These strategies vary in the degree of cost effectiveness which can be realized from each. Our discussion addresses the elements of each which may contribute to or detract from its relative cost effectiveness. Actual sales figures were not available from all Clearinghouses, therefore a cost effective analysis was not possible in this limited effort.

Issues:

Some general overriding issues affect the consideration of any alternative marketing strategy for ERIC Clearinghouses. First, the relationship of the Clearinghouses to the affiliate organization is a "symbiotic" one. The degree of symbiosis varies for respective Clearinghouses. Our findings show that some Clearinghouses give their total products without return to the affiliate; whereas other Clearinghouses along with the affiliate sell their products and have a revolving fund; while still others have a revolving fund with the affiliate or publishers where all funds are rechanneled into the Clearinghouse's operation for more production. The political and other issues related to "tampering with" these relationships may result in a greater loss for the ERIC System as a whole, as opposed to keeping these relationships intact as they are - and instead focusing on the "untapped Market" for ERIC products for providing more access and awareness. Some major questions to be addressed, at a minimum in considering marketing alternatives for the ERIC System are:

How much of a market, and ERIC System loss can be expected if the unique relationships of the Clearinghouses and the affiliate are altered or discontinued? How autonomous can Clearinghouses become and still maintain their current level of effectiveness? If Clearinghouses were to become completely autonomous how effectively could they produce, distribute and market their own products? Would cost increase? How self-sufficient could Clearinghouses become with a revolving fund approach? No current data is available on total sales. These are policy decisions which must be addressed by NIE, before alternatives in marketing can be decided. They are not all answerable from data generated by this limited effort, but merit further study, deliberation and consideration by NIE.

The results of the Clearinghouses' survey showed that three basic marketing alternatives are currently being utlized by

Clearinghouses. The current marketing philosophy of ERIC could accommodate all Clearinghouses being requested to utilize one of the three approaches currently being utilized. From a cost effectiveness perspective, the most desirable of these for consideration would be those marketing alternatives which free the monies produced from sales for further Clearinghouse use.

If a market research approach is selected, Clearinghouses will need to take inventory of their present staffs in order to determine what steps need to be taken in order to upgrade skills and differentiate, or hire needed personnel. A truly successful marketing program that is market research oriented would require competent staff in the critical jobs of:

A. Research of the Market

- size of market
- market needs

B. Marketing tools

- pricing
- distributing
- advertising

C. Production

D. Evaluation

As specified, the market research approach may prove to be the costliest if sales production cost are not closely monitored. Conversely the Clearinghouses could possibly make a profit with this approach. However, since the mission of the ERIC System is to serve "information needs" ERIC may be more interested in maintaining its mission through making "better use" of its products-as opposed to making a "profit" or "breaking even" or putting monies back into the Clearinghouse budget for production of more needed IAP's or other products. Two current alternatives which partially facilitate this are: a) the marketing of Clearinghouse products by an outside publisher, and b) the marketing of products by respective Clearinghouses. The potential of these two marketing alternatives with some variations, plus a third alternative are presented here as optional strategies for marketing:

Marketing Optional Strategy #1

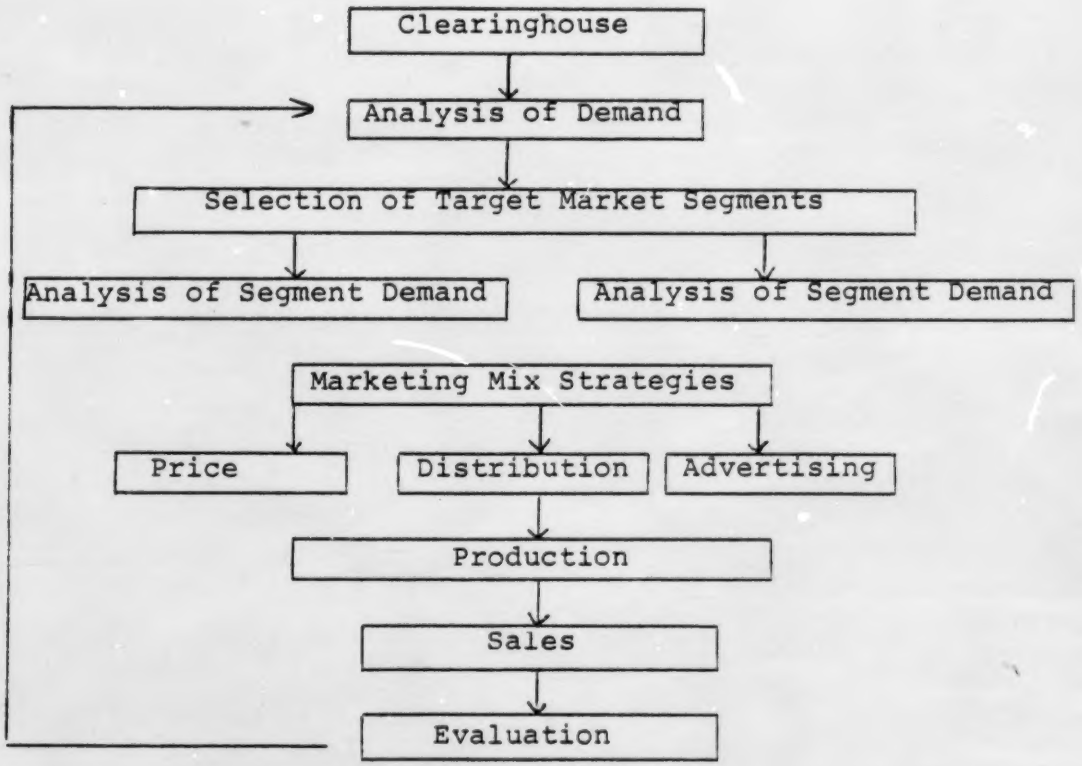
The most radical optional marketing strategy would be based on the philosophy of market research and would require

an alteration in the current ERIC System's marketing philosophy.

As a first step Clearinghouses would have to develop a structure that can utilize the market research approach. The crucial element would be a strong research unit to identify the total client universe, determine their needs and estimate the size of the market on a control basis. Some Clearinghouses have started to develop some elements of this approach as specified in the Clearinghouse Survey findings. Clearinghouses would then develop an efficient and effective unit to successfully promote their products. Market research would identify the target audiences and the need for the Clearinghouses's products. Promotion's task would be to create awareness and demand. The structure would call for these activities to take place before products are produced.

This model does not require a major re-ordering of present Clearinghouse structures. It would require that Clearinghouses re-order their approach from being production oriented to becoming market oriented as shown in Figure 3.

Figure 3
A Suggested Model for Clearinghouse
Marketing Requirements
Based on Optional Strategy #1



Marketing Optional Strategy #2

A more palatable optional market strategy which would not alter the current philosophical approach of the ERIC System nor require Clearinghouses to relinquish any of their autonomy with the current affiliates, would require Clearinghouses to produce products based on the currently utilized methods of determining demand and forward the product to the current affiliate or publisher for production. However, products would also be forwarded to a central source for printing and distribution, such as the Government Printing Offices (GPO). This would mean that orders could be filled from one central source as well as from the Clearinghouse and/or their affiliate.

CAI's research shows this as a more feasible approach in providing access to clients. The Users Survey results showed that clients are more likely to order a greater variety and volume from a central source. Also the research findings show that distribution is cheaper when orders are filled from a central source.

This model does not require any re-ordering of present Clearinghouse structures as shown in Figure 4. It would mean reaching a greater variety of clients.

THis approach would require that a relationship for printing and distribution be established with GPO. The responsibility for awareness and identification of clients would remain with the Clearinghouses and their affiliates.

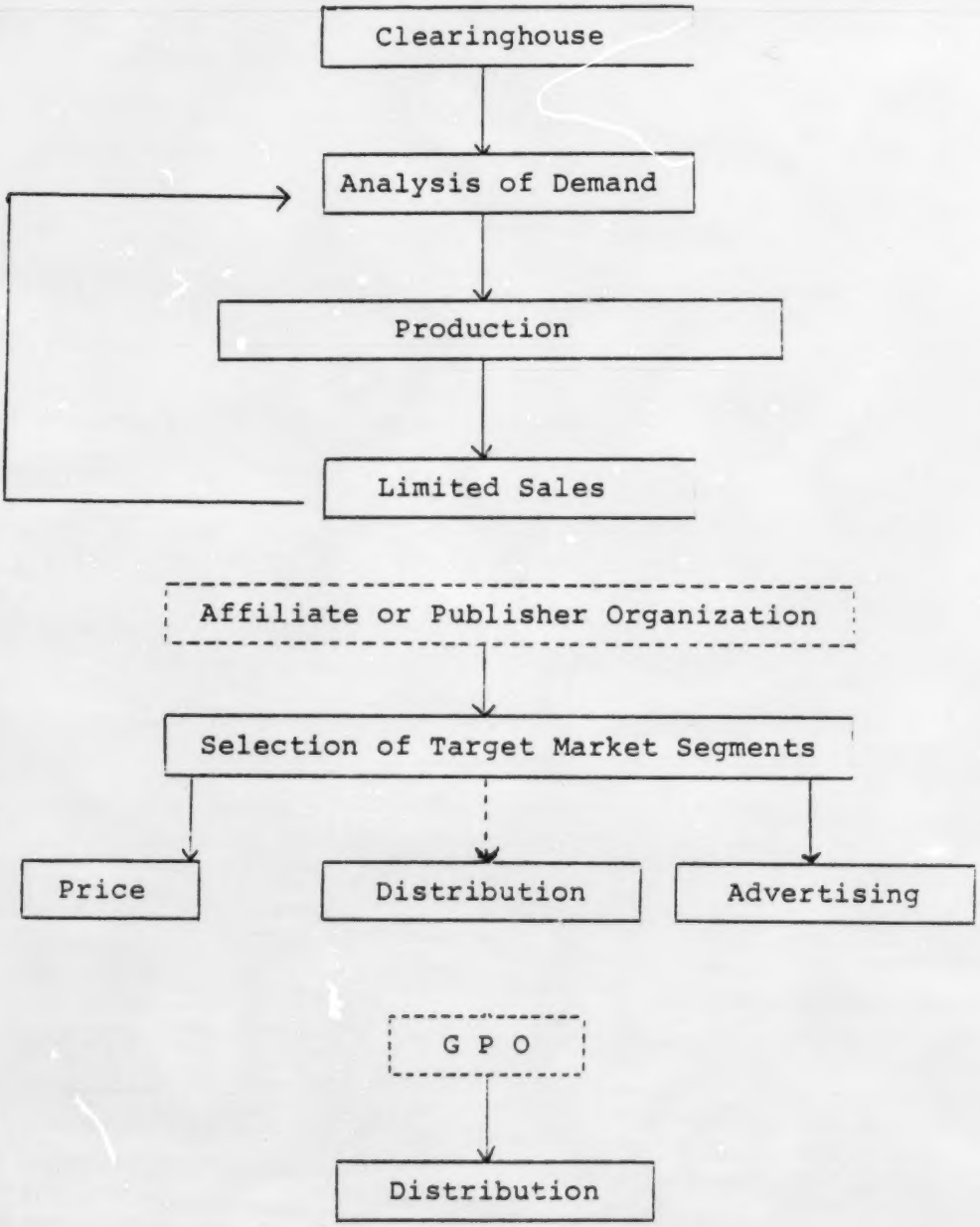
- Variation #2A - Since EDRS currently does some central distribution of printed copy, and all distribution of microfiche, it may be feasible to establish an additional capability for central distribution of all printed and microfiche copies with EDRS.

Marketing Optional Strategy #3

A third optional strategy worthy of consideration--and the least radical of the three--would not alter the current philosophical approach of the ERIC System--but would create a separate entity to handle the "market" not currently being reached by the Clearinghouses and their affiliates.

This approach would keep all current ERIC System functions intact, but would establish a separate entity to handle the "untapped/unserved" market of the ERIC System. As suggested by Clearinghouses (see page 4 of this report), some of this market may include: "teachers, counselors and other appropriate audiences."

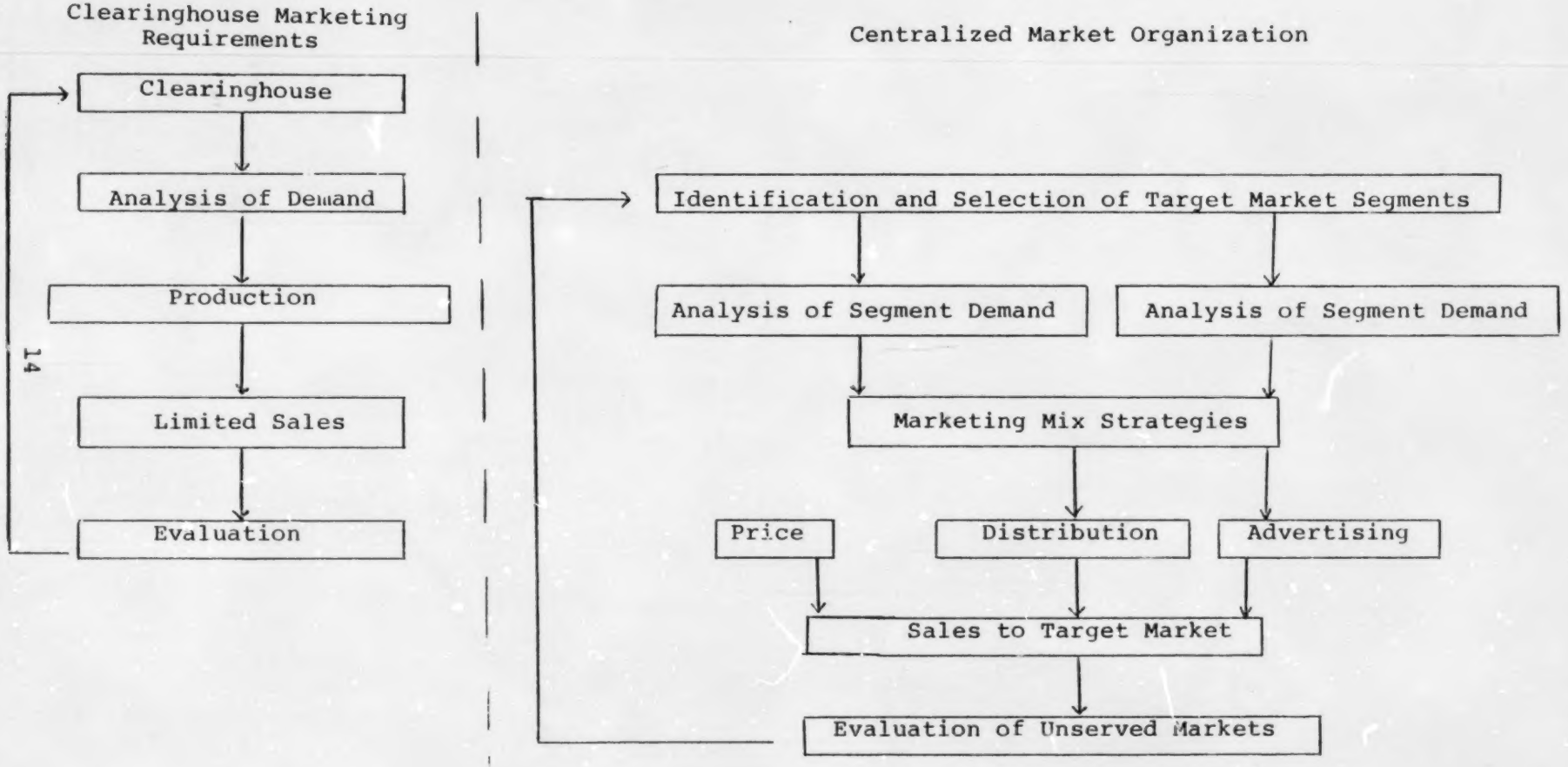
Figure 4
A Suggested Model for Clearinghouse
Marketing Requirements
Based on Optional Strategies #2



This approach would facilitate some channeling back of funds into advertising and distribution to the central source. This would provide a revolving fund allowing wider distribution and provision of more access.

This approach would require that an entity be identified where no conflict in the sale of government documents exists. Also a very cooperative and collaborative relationship would have to be established with each Clearinghouse and the total ERIC System. The current relationships and responsibilities would remain with Clearinghouses and their affiliates. However, feedback to Clearinghouses on needs of the "unserved" market would be required in order to generate products to serve needs of all markets. This approach is shown in Figure 5.

Figure 5
A Suggested Model for Clearinghouse
Marketing Requirements
Based on Optional Strategy #3



5.0 NIE MARKETING PROGRAM: MARKETING PLAN REQUIREMENTS FOR THE ERIC SYSTEM BASED ON PROPOSED OPTIONS

Planning is the design of a desired future and of effective ways of bringing it about.

It is CAI's understanding based on this effort that NIE desires to increase the access and awareness of its products, to increase the number of users, and to be cost/effective in bringing these better products to the user.

If Clearinghouses design marketing plans based on the options as suggested, IAPs will be produced to meet predetermined needs of a wider market. These IAPs will be targeted to a broader interested audience and promoted so as to increase the awareness of larger segments of the population. Whatever strategy is adopted, NIE must build its yearly marketing plan from information (marketing plans) supplied by the Clearinghouses. These marketing plans should be compiled so that NIE will have a master market plan that spells out the following:

1. Number of IAPs to be produced.
2. Markets to be served.
3. Subject matter to be addressed.
4. Dates IAPs will be produced.
5. Promotional activity planned.
6. Anticipated sales.

NIE's marketing program, once established, must be translated into plans of action, (tactical plans) in order to reach NIE's objectives. The following are recommended strategies:

1. Educate Clearinghouses about the future use of a comprehensive marketing program whichever one is adopted. This may require a conference seminar type session with workshops, etc., on each aspect of marketing: market research, production, pricing, etc.
2. Establish target dates for submission of plans from each Clearinghouse.
3. Refine and return plans for Clearinghouses for acceptance or further refinement.
4. Construct master plan (cost factor).

5. Distribute to Clearinghouses.

6. Implement plans.

7. Control and evaluate.

Planning:

For the Clearinghouses planning is the key activity to implement whatever alternative is adopted for marketing. It provides the common structure for all of the Clearinghouses' activities. It must be understood and accepted as a management tool.

Planning begins with an understanding of the basic objectives of the ERIC Clearinghouse System. Each Clearinghouse should establish objectives that are consistent with the parent organization. These objectives when compiled will give the total system the goals for a given period.

Objectives do exist at present but not in a form that allows for marketing programs to be defined for each Clearinghouse. In order for a marketing program to unfold each Clearinghouse must set objectives for the year. These objectives must meet certain criteria.

1. They must be attainable.

2. Quantifiable.

3. Have a target date.

4. Be measurable (quality factor).

5. Be consistent with parent organization's objectives.

The objectives set forth in the marketing plan must be consistent with the objectives of the parent organization. These individual plans from each Clearinghouse should create the marketing plan for the parent. This makes it possible for NIE (ERIC Central) to state its objectives for the year. It also allows for the development of a budget, the establishment of a publication calendar, the scheduling of NIE promotional activities, and the identification of target audiences.

Each Clearinghouse should submit marketing plans to NIE. Plans should include:

1. What is to be produced?

2. Quantity?

3. When it will be marketed?

4. Markets to be served?

   a. Size
   b. Type

5. Marketing program?

   a. Price
   b. Method of distribution
   c. Advertising program
      1. Media
      2. Schedule

Clearinghouses should submit a marketing plan for each product to be produced. This will afford Central ERIC (NIE) the information necessary to determine those markets not being served.

NIE (Central ERIC) should collect information on a continual basis on the effectiveness of each marketed product. Sales figures should be collected on each product sold. This is a must for informed policy decision-making regarding the ERIC System.

Suggestions re: marketing elements.

Decision Area	Recommended Strategy
Demand Strategy	The static state of present demand should be expanded so that there is distribution to a larger market than those of the affiliate organization. Market research is needed to identify segments not being served that have interests that coincide with those of the Clearinghouses. The ERIC market should be determined and served by other entities in addition to the professional associations. Entities for possible consideration are shown in the optional strategies discussed in the previous section of this report.
Product	Clearinghouses currently have various means of determining what products to produce. These include letters of inquiry, advisory boards, review of literature, mail back questionnaires, etc. Product development needs to include more direct client participation. Some means of assessing client input and needs should be developed in whatever marketing strategies is finally adopted. One method often used is "focus-group" interviews to determine audience interest. Group interest should be translated into

not just sunject matter but also quantified in terms of national institutional needs.

Decision Area	Recommended Strategy
Packaging	Our research indicated that each Clearinghouse "does its own thing re: packaging of product. This may not be the best client attracting means of marketing ERIC products. NIE should standardize the product so that a "corporate" image is established. Our research indicated that some activities are already taking place in this area. However, Clearinghouses should develop a distinct package for their particular products. Brand recognition under a corporate umbrella has proven more attractive to clients. This strategy will give Clearinghouses and ERIC a central identification and also allow for individuality.
Price	NIE should maintain information on price for products throught the system. Prices should be reported for each product projected to be sold during the year. Input data on price of each product should be specified by each Clearinghouse. Some consistency of product should be established if at all possible.
Distribution	Our research strongly supports centralized distribution. We therefore suggest that eventually promotional materials, developed and distributed by Clearinghouses, be designed to have orders mailed from a central source. This strategy would eliminate sixteen mailrooms and distribution centers, and replaces them with one. Though it may not reduce personnel on a 16:1 ration it would certainly reduce the cost factor considerably. Orders sent to Clearinghouses would be forwarded to central for mailing. Orders to Clearinghouses would decline and disappear completely in time. As alternatives, the optional strategies presented previously would serve to begin to reach the untapped market of ERIC. Distribution considerations for each are represented.
Advertising	Although advertising is mostly handled by the affiliate organizations, Clearinghouses could also do their own product advertising. A good marketing plan will allow the Clearinghouses to advertise all current and future IAPs in one

Decision Area	Recommended Strategy
Advertising	brochure. NIE can co-ordinate joint mailing if they possess a master list schedule of items to be produced as suggested.
Advertising Media	Although the Clearinghouse products are advertised by affiliates and associates, further possible use of journals, professionally oriented newspapers, and magazines to market should be investigated. The cost/benefit of public television to advertise the ERIC System and its services should be explored. Many people do not know what the ERIC System is or does.
Advertising Message	Advertising content should stress current and relevant information on topics in the area of education available through ERIC. Research data and its availability; quantity and quality of information available should also be emphasized.
Promotion	Conferences should be utilized to bring ERIC System's resources to the attention of potential customers. NIE currently co-ordinates conferences. Other conferences that appear outside specific Clearinghouses interest areas should be investigated.
Evaluation	Group-focus interviews, evaluation feedback forms or other techniques should be explored to see if users evaluate the ERIC products favorably. Each Clearinghouse should have its own user evaluation procedure. The implementation of the marketing plan for each product against the actual plan should be continually evaluated by ERIC central.

These recommendations must be examined against budget and other internal givens of the ERIC System, such as the political and autonomous relationship which currently exists between Clearinghouses and the affiliate organizations. Most of the recommendations have been made with a view to increasing audiences - and improving and marketing products at a reduce cost.

Marketing planning requires skills in the analysis and synthesis of facts and in creativity and communication strategies. ERIC must identify people with these skills, or develop this capability in their present network in order to implement a sound future marketing strategy.

APPENDIX A

Tables of Comparative Ordering for ERIC Products (Centralized vs. Decentralized)

TABLE I

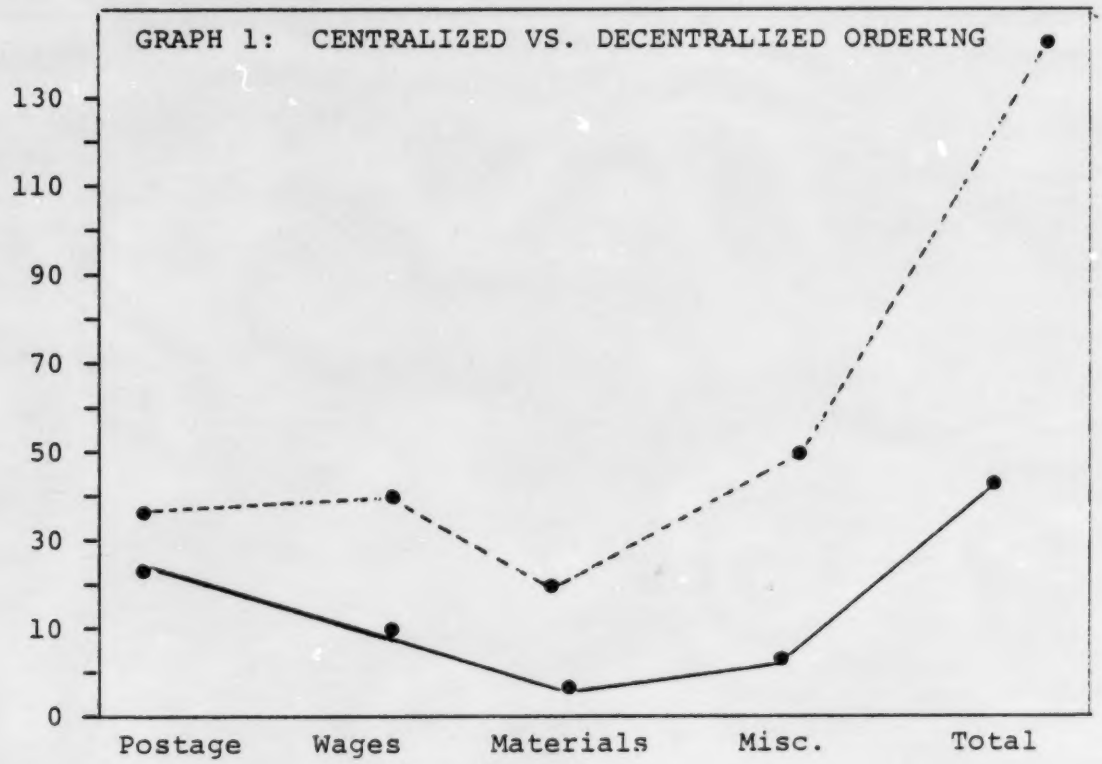
CENTRALIZED ORDERS						
ORDER ORIGIN	NO. OF ITEMS ORDERED	POST-AGE	WAGES/ SALARIES	MATER-IALS	MISC. EXP.	TOTAL
Lock Haven State College, PA	5	3.11	1.55	.50	1.83	6.99
Dallas Independent School District	4	3.46	1.55	.50	1.83	7.34
Univ. of Michigan Dearborn, Mich.	9	4.60	1.55	.50	1.83	8.48
Westfield State Westfield, Mass.	3	2.96	1.55	.50	1.83	6.84
Pan American Univ. Brownsville, Tex.	21	10.00	1.55	.50	1.83	13.88
TOTALS	42	24.13	7.75	2.50	9.15	43.53

NOTE: Centralized orders were sent by registered mail.

TABLE 2

DECENTRALIZED ORDERS					
ORDER ORIGIN	POST-AGE	WAGES/ SALARIES	MATER-IALS	MISC. EXP.	TOTAL
Look Haven State College, PA	1.75	4.65	1.50	5.49	13.39
Dallas Independent School District	3.07	4.65	1.50	5.49	14.71
Univ. of Michigan Dearborn, Mich.	8.50	10.85	3.50	12.81	35.65
Westfield State Westfield, Mass.	1.88	3.10	1.00	3.66	9.64
Pan American Univ. Brownsville, Tex.	21.88	16.05	5.50	20.13	63.56
TOTALS	37.08	39.30	13.00	47.58	136.96

The following graph demonstrates a visual picture of the differential costs.



Key: ----- Decentralized Orders

——— Centralized Orders